March 25, 2003

Mr. Jon Heinrich
Bureau of Air Quality Management
P.O. Box 7921
Madison, WI 53707

Dear Jon:

The following comments are submitted on behalf of the members of the Wisconsin Paper Council regarding proposed NR 446 relating to the control of mercury emissions.

The Wisconsin Paper Council is opposed to proposed NR 446.

In general, we are concerned that the proposed rule will:

- Provide little, if any, environmental benefit in Wisconsin;
- Significantly increase electric rates at the higher reduction levels, resulting in substantial cost increases for the paper industry;
- Conflict with federal laws and regulations now under consideration for both utility and industrial boilers;
- Historical mercury emission estimates may not be accurate and should not be used as the basis for regulation unless further study is conducted and both DNR and affected sources are confident that the estimates are accurate; and
- Restrict economic growth at manufacturing companies subject to the mass cap requirement.

Environmental Benefits of the Rule

Wisconsin's paper industry shares the public's concern regarding the mercury content of fish in Wisconsin lakes and rivers. Our concern for environmental protection has been demonstrated through several voluntary initiatives, including the Pollution Prevention Partnership that focuses on reducing all environmental releases beyond regulatory requirements, the Green Guarantee that promotes sustainable forestry practices, and the Wisconsin Paper Council Environmental Management System that promotes a formal system for minimizing environmental impacts.

However, we are concerned that the proposed rule will do little, if anything, to reduce mercury levels in fish. Further, we are concerned that the Department has not adequately documented potential environmental benefits and the uncertainty surrounding any estimate of benefits.

Mercury air emissions are a global issue. The mercury that is deposited on Wisconsin lakes and rivers originates throughout the world. It has been estimated that approximately 5,500 tons of mercury are emitted into the atmosphere annually from all sources. EPA's Mercury Report to Congress in 1997 estimated that 158 tons, or about three percent of the worldwide total, comes from man-made sources in the U.S. About 50 tons, or one-third of this amount comes from coal-fired utility sources. In Wisconsin, DNR's Air Emission Inventory for 1995 and 1996 shows that utilities emit about one ton of mercury, with industrial and commercial coal-fired boilers contributing less than 500 pounds.

As this information shows, Wisconsin sources of mercury emissions are a tiny fraction of the amount emitted globally that falls on our lakes and rivers. While Wisconsin sources undoubtedly contribute some amount of mercury, it is likely that the proposed reduction in mercury emissions from Wisconsin sources would have little, if any, measurable effect on mercury deposition in Wisconsin and would result in little, if any, improvement in the mercury content of fish in Wisconsin waters.

Data from the DNR appears to support our concern. From 1990 to 1996 the Department estimated that mercury emissions dropped over 30%, from 8,069 pounds to 5,611 pounds. Yet no fish advisories were removed. In fact, more fish advisories were added.

A report from the Minnesota Pollution Control Agency indicates that a 50% reduction in air emissions within Minnesota alone would result in only a 5% reduction in deposition. The same situation may be true in Wisconsin. DNR should work with the mercury technical advisory committee to examine the Minnesota study, as well as other studies, to determine what is the best estimate of potential benefits from mercury reductions from Wisconsin sources.

The evaluation of potential benefits should consider the results of the EPA Devil's Lake study. This study was specifically designed to assess mercury deposition from local and regional sources. We are advised that the initial computer simulations should be run shortly. Assuming that some refinement of the model will be necessary, study result should still be available within a reasonable time period. Failure to more fully evaluate the environmental benefits of the rule and consider the results of the EPA Devil's Lake study would indicate that the Department does not care what the environmental benefits would be. In this case, NR 446 would be regulation for the sake of regulation.

Costs

Although the rule is directed at coal-fired utilities, it could result in significant costs for the paper industry. The paper industry is the largest energy using industry in Wisconsin. The costs imposed on electric utilities will translate directly into increased electric rates and increased costs for Wisconsin papermakers.

One utility, serving thirteen paper companies, has estimated that the cost of the proposed rule would increase rates by 25%, when fully implemented. In total, this translates to an increased energy cost for the affected companies of almost $21 million per year. Remember, this estimate is for only one utility.

> Wisconsin's paper industry has been in a recession for some time and it simply cannot absorb this type of cost increase – with little, if any environmental benefit -- and remain competitive.

Federal Regulations

USEPA has been looking into the mercury issue for some time. A national approach to mercury control, while still not addressing global mercury concerns, would be much more likely to result in meaningful environmental improvements than a Wisconsin-only rule.

In addition, a national approach would avoid the potential for conflicting state and federal regulations. EPA is developing a rule to control mercury emissions from utility sources and is seriously considering the regulation of industrial combustion sources. Federal action is expected in the next few years. Debate at the federal level needs to be finalized before potentially conflicting state regulations are considered.

Emissions Data

The rule relies on a historical baseline (1998-2000) during which little regulatory attention was focused on mercury emissions. Various estimation methods were used, not only by paper companies, but by all sources.

In an effort to estimate mercury emissions using a common methodology, WPC members worked with DNR staff to recalculate baseline mercury emissions using a formula recommended by DNR staff and included in the rule. The recommended methodology was based on research done by USEPA and EPRI resulting from EPA's information collection request for mercury data from electric utilities.

The Briefing Memo accompanying the rule indicated that the following five paper companies would be affected by the proposed rule:

Company	Average Hg Emissions 1997-1999
Appleton Papers – Locks Mill (Appleton Coated)	140
Weyerhaeuser	65
Consolidated Papers – Kraft Division (Stora Enso)	48
Fort James (Georgia-Pacific – Green Bay West)	47
Consolidated Papers – Niagara (Stora Enso)	13

Re-estimation of mercury emissions using DNR's recommended method significantly changes both the level of estimated emissions and the potentially affected companies.

Revised mercury emission estimates for the five companies listed in the Green Sheet are as follows:

Company	Average Hg Emissions 1998-2000
Appleton Papers – Locks Mill (Appleton Coated)	46
Weyerhaeuser	<1
Consolidated Papers – Kraft Division (Stora Enso)	18
Fort James (Georgia-Pacific – Green Bay West)	21
Consolidated Papers – Niagara (Stora Enso)	9

As a result of using the DNR estimation method, three of the original five companies would exceed the proposed rule threshold of ten pounds.

One obvious difference between the two estimates is that they are for different time periods. However, two additional clarifying comments are necessary. First, the Weyerhaeuser emission source is a hog fuel boiler that burns wood. No coal is fired. The previously reported emissions of mercury are far in excess of levels that would be expected from this source. The revised emission estimate relies on a 2001 NCASI emission factor. Documentation of that emission factor is enclosed. Second, the Appleton Coated source is a boiler that burns both coal and sludge. During the years in question, Appleton Coated used a caustic soda in the production process that was

made using the mercury cell process. The company has since changed to a non-mercury cell caustic and emissions for 2001 and thereafter are expected to be in the vicinity of ten pounds per year. (Low-level testing of the sludge resulting after the process change will be taking place shortly, allowing mercury emissions from combustion to be better estimated.)

Using the DNR recommended estimation method resulted in the identification of four additional companies that would exceed the proposed ten pound rule threshold:

Company	Average Hg Emissions 1998-2000
Stora Enso – Biron	19
International Paper – Kaukauna	17
Domtar	17
Packaging Corporation of America	11

Complete documentation of the emission estimates for all companies is enclosed.

Reliability of Emission Estimates

We appreciate the efforts of DNR staff to work with us in developing emissions estimates using a common methodology. And while these estimates may be the best currently available, neither DNR nor industry knows if these estimates are accurate.

Emission estimates went up for some units and down for others. In some cases, the estimates differed significantly from stack tests and from established emission factors. In one case (G-P, Boiler 9, coal), the recommended method resulted in a negative emission.

Further, the recommended methodology was based on the performance of utility boilers, not industrial boilers. We really do not know if the utility data is directly transferable to industrial boilers.

> Potential problems with data reliability are particularly important because these estimates are proposed to serve as the basis for regulation and establishment of an emissions cap. If historical emissions are going to be used in this type of regulatory setting, both the DNR and industry must be certain that they are accurate. Neither group can make this claim. Additional study should be undertaken to estimate industrial mercury emissions that both the DNR and industry have confidence in.

NR 446 should not regulate sources based on questionable emissions data.

Mercury Emission Cap

For smaller sources, like paper mills, the rule proposes that a source be regulated if mercury emissions in each year from 1998-2000 exceed ten pounds. A source is being interpreted by DNR to mean an entire facility and all emissions units at the facility. Sources that exceed the ten pound threshold would be subject to a facility-wide emissions limit, or cap, equal to the average emission level during the 1998-2000 baseline period.

The proposed emissions cap has several serious shortcomings. First, a cap on emissions would have very little environmental benefit. Assuming for discussion purposes that the revised emission estimates are at least representative, if not completely accurate, the average mercury emissions of the five largest paper industry sources would be about 121 pounds per year. This compares to the Department's original estimate of 313 pounds per year for the five largest sources. Industry mercury emissions appear to be significantly less than originally thought.

A cap, by itself, would offer no environmental benefit. It would only prevent future increases. However, it appears that DNR is treating existing sources much more harshly than new sources when guarding against future increases. New sources would be allowed to emit up to ten pounds per year without the need for offsets, while existing sources would not be allowed to increase at all. This unfairly penalizes existing sources.

Second, a cap on mercury emissions from coal-fired boilers would effectively be a cap on all emissions – and a cap on economic growth. Mercury is very difficult and expensive to control. It would not be feasible for companies to control only mercury from these small sources. As a result, companies would have no choice but to limit all emissions in order to meet the mercury cap. This would limit the capacity of the affected sources – and limit the ability of these companies to grow.

A cap would also preclude multi-fuel boilers from switching to lower cost coal when gas price increases create severe economic hardship, as was the case last winter.

Based on the average mercury emissions for 1998-2000 compared to the potential to emit for six of the seven potentially affected paper companies (such a comparison would no longer be valid for Appleton Coated because of the process change), a mercury emissions cap could limit overall facility utilization to between 51.6% and 66.6% of full operating capacity. This would be a significant restriction on production growth at these facilities.

> Consolidation and globalization in the paper industry are forcing Wisconsin mills to compete for scarce resources with mills in other states

and other countries. We cannot limit the ability of Wisconsin mills to expand and expect them to compete successfully in the long run.

Third, applying the cap on a facility basis effectively captures very small emission units at industrial facilities. Based on the revised estimates, it appears that the largest single mercury emitting unit in the paper industry is about ten pounds per year. Some are less than one pound per year. Yet, a facility cap would have the effect limiting these very small sources. Industrial facilities operate as integrated units. They do not have the ability to "shift load" like a utility in order to manage emissions. It does not make economic or environmental sense to regulate these very small units.

Fourth, the ten pound threshold level is arbitrary. One company could have average emissions of nine pounds per year while another company averaged eleven pounds per year. The second company would be subject to an emissions cap, but the first company would not. Yet, the environmental impacts of these two companies would be the same – insignificant.

Fifth, the imposition of a cap based on estimated historical emissions could cause compliance problems if future testing indicates that emissions are higher than originally estimated. Companies should not be put in the position of being out of compliance with a rule through no fault of their own.

Other Rule Issues

Baseline Period. It is not clear why DNR picked 1998-2000 as the baseline period. Air emissions inventory data included in the Green Sheet materials indicates that significant statewide mercury reductions occurred 1990 to 1995. We requested that this information be updated to 2000, but we have not received this information. We are aware that other states have used 1990 as a baseline. DNR should work with the Technical Advisory Group to evaluate alternative baseline periods.

Mercury Reduction Registry. We have several questions regarding the proposed mercury reduction registry. It appears that any source of any size can register mercury reductions with the Department. The size of mercury reductions that can be registered appear to be limited by NR 446.07 relating to mercury-containing product reduction projects and NR 446.08 relating to pollution reduction projects. The Department's registry is, in effect, the bank in a banking and trading system.

It appears that industrial source mercury reduction efforts would fall under the definition of pollution reduction projects. These projects are subject to a five pound minimum mercury reduction. Our mercury re-estimates identified several paper industry sources that are less than five pounds. We are not aware of any technical basis for the five pound threshold. We recommend that this threshold be lowered to one pound.

The only pollution reduction projects that may be registered are those that begin after the effective date of the rule. This would prevent Appleton Coated from registering a very significant mercury reduction that occurred after the baseline period, but before the effective date of the rule. Companies should be allowed to register pollution reduction projects that have occurred any time after the baseline period.

Variance. The rule provides a variance from the reduction requirements for utilities, but it does not include a variance provision for sources subject to the mass cap requirement. A variance should be allowed for mass cap facilities. DNR's Technical Advisory Group could determine reasonable conditions for this variance.

Units Subject to Reduction or Cap Requirements. Wisconsin statutes impose restrictions on the ability of the Department to regulate sources subject to a federal MACT standard. Paper industry recovery boilers are subject to a federal MACT standard and should not be subject to the mass cap requirement.

Compliance Testing Requirements. It is not clear that the compliance testing requirements in NR 446.11(1)(b) are consistent with the baseline establishment procedures. Differences between the two procedures could cause compliance problems. DNR's Technical Advisory Group should evaluate these procedures closely.

Offsets. The Department staff has consistently described the offset procedure as applying to any new source that emits in excess of ten pounds of mercury. However, the language in NR 446.05 could be interpreted to require offsets for any increase in mercury. For example, if a company were required to obtain a construction permit for reasons other than exceeding the ten pound mercury threshold, sub. (2) could require offsets for any mercury emissions associated with the project. This language should be reviewed closely and amended as necessary.

Voluntary Mercury Emission Reductions

DNR has asked for comment on alternatives to the proposed rule, including a voluntary approach to mercury reductions. We support a voluntary approach. In addition to the Appleton Coated project, we are aware that Vulcan Chemicals has been taking steps to reduce mercury emissions. These project demonstrate that a voluntary approach can work.

Conclusion

While we would all like to reduce mercury fish advisories, it appears that there is little that Wisconsin, acting alone, can do to accomplish this goal. We urge the DNR to defer action on NR 446 and to work closely with EPA and other federal officials to develop a national approach that will be more environmentally beneficial, will avoid potentially conflicting regulations, and will hopefully be less costly than independent state action.

We are willing to work with the Department to help develop a voluntary reduction strategy that will improve the quality of Wisconsin's waters, while avoiding the problems that we have identified.

Please contact us with any questions about these comments.

Sincerely,

Edward J. Wilusz
Director, Government Relations